

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of Group I, in the reply filed on November 19, 2009, is acknowledged. The traversal is on the ground(s) that Group I and Group III would not cause undue burden. This is found persuasive. Accordingly, Claims 1-8 and 13-15 will be examined and claims 9-12 withdrawn.

The requirement is still deemed proper and is therefore made FINAL.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (5,406,933), which discloses substantially all of the claimed limitations, for example, a gas fired heating apparatus comprising: a) a plurality of burners 54, b) a source of a combustible gas and a modulating gas control valve 56 connected to said group of burners, said modulating control valve controlling the flow of combustible gas from said source to said first group of burners; d) a heat exchange tube 38 associated with each burner and having an inlet and an outlet, said associated burner firing into an inlet of said associated heat exchange tube; e) a collector chamber 22a,26 communicating with outlets of said heat exchange tubes; and, g) an induced draft blower 30 concurrently communicating with said sections of said collector chamber. Lu further teaches an orthogonally arranged air plate 38a with blocking member for restricting the flow of air (as the size of the opening is limited it inherently limits, regardless of how little, the flow of air. Nevertheless, Lu fails to specifically recite a second set of burners with control valve separated by a plate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a second identical furnace arranged side by side with the furnace disclosed by Lu with the housing side wall acting as the claimed baffle member, since it has been held that to provide duplicate parts for multiplied effect is not the type of innovation for which a patent is granted. *St. Regis Paper Co. v. Bemis Co., Inc.*, 193 USPQ 8, 11.
5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (5,406,933), which discloses substantially all of the claimed limitations.

Nevertheless, Lu fails to specifically recite the blower being of the two speed or variable speed variety. Official Notice is given that variable speed blowers are old and well known in the art. Such an arrangement has the clear and obvious benefit of providing for enhanced control of the system. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the claimed blower type into the invention disclosed by Lu, so as to provide for enhanced control.

6. Claims 4 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (5,406,933), which discloses substantially all of the claimed limitations.

Nevertheless, while Lu discusses various heat exchanger rates, Lu fails to specifically recite the claimed capacity and ratio. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the claimed values into the invention disclosed by Lu, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable values or ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Swain*, 156 F.2d 239. See also Peterson, 315 F.3d at 1330, 65 USPQ2d at 1382 ("The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages.").

#### ***Prior Art***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hazama discloses a furnace including a plurality of burner sets

with control valves with many of the claimed components. Nevertheless, in order to avoid overburdening the applicant with redundant rejections, these references were not applied.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 571 272 4871. The examiner can normally be reached on Monday through Friday during regular business hours.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center telephone number is 571 272 3700.

January 12, 2010

/Alfred Basichas/  
Primary Examiner, Art Unit 3743